

**Department of Land and Natural Resources
Division of Forestry & Wildlife
Annual Report for Act 100, SLH 1999
November 2007**

I. Goals:

- Responsibly manage and protect watersheds, native ecosystems, and cultural resources and provide outdoor recreation and sustainable forest products opportunities, while facilitating partnerships, community involvement and education. Malama ika 'Aina.
- Promote healthy diverse forest ecosystems throughout Hawaii that provide clean air and water, habitat to support healthy populations of native plants and animals, recreational opportunities, and sustainable forest products.
- Use aggressive but careful management to minimize adverse effects on Hawaii's forests from insects, disease and wildfire.
- Promote the use of incentives, the collection and sharing of information, cultural sensitivity and appropriate regulations to foster a climate for responsible forest stewardship.

II. Policies and Objectives and Estimated Time frame:

Policy A: To protect, restore, and enhance Hawaii's natural areas, forested watersheds, native ecosystems, unique native plant and animal species, cultural and geological features for their inherent cultural, scientific, educational and economic values for the enrichment of present and future generations.

Objectives and Time frame:

- A.1. Promote, encourage, and advocate for incentives to encourage the maintenance and enhancement of key watersheds on public and private lands and expand participation in public and private watershed partnerships on each island. Provide \$3.0 million in watershed management grants to 9 watershed partnerships statewide. (1 year)
- A.2. Control livestock and non-native animal populations in state forest and natural areas reserves, sanctuaries and priority watersheds at levels non-damaging for unique native species and ecosystems. Control wild cattle in Hilo Forest Reserve and State Forest Reserve lands on Maui. (1 year)
- A.3. Fund control and eradication of coqui frog throughout the state. Develop a Coqui frog control plan and coordinate control efforts on State lands and among island Invasive Species Committees. (1 years)

- A.4. Survey and control noxious plants, forest insects and diseases that can damage watershed integrity and native ecosystems. (5 years)
- A.5. Plan for and implement the reforestation and management of deteriorating and/or disturbed state watersheds for watershed value enhancement. Implement a joint management agreement with Office of Hawaiian Affairs (OHA) to manage the newly acquired Wao Kele O Puna “OHA” Forest Reserve on Hawaii. (5 years)
- A.6. Plan and implement expanded management plans for Natural Area Reserves, Watershed Partnerships, State Forest Reserves, and Youth Conservation Corps to effectively utilize the new source of funding in the Natural Area Reserve Fund to maintain and restore watersheds and protect and enhance native species habitats. (5 years)
- A.7. Administer the Natural Area Partnership Program (NAPP). (1 year)
- A.8. Develop procedures for land acquisition under the Legacy Lands Bill. Complete the first acquisition of an Agricultural Easement under the Legacy Lands Bill on ranch land on Molokai. Establish the Land Conservation Fund Commission and process the first set of proposals for acquisition under the Legacy Lands program. (2 years)
- A.9. Establish the first Tropical Experimental Forest in Hawaii and the Pacific and develop agreements and procedures for its operation. (1 year)

Policy B: Manage habitats to protect, maintain, and enhance the biological integrity of native ecosystems. Reduce the impacts of wildfires on native ecosystems and watersheds. Reduce the impacts of invasive species on native resources. Protect, maintain, and enhance native species populations, and recover threatened and endangered species. Promote outreach and foster partnerships to improve public understanding, responsibility, and participation. Conduct monitoring and evaluation to guide the development of recovery and management plans, and ensure cost effective adaptive management of implementation actions and tasks.

Objectives and Time frame:

- B.1. Insure viable populations of native species and increase populations of endangered species by protecting and managing their natural habitats via a system of state-owned and managed sanctuaries, forest and natural area reserves, and cooperative managed areas. Expand habitat restoration efforts and mangrove removal at Pouhala Marsh, Oahu. (1 year)
- B.2. Prevent and suppress forest and range fires on key watersheds to include forest reserves, public hunting areas, and natural area reserves. Cooperate with established fire control agencies for the protection of other wildlands not within departmental protection areas to the extent needed to provide for public benefits and environmental protection. Establish Fire Wise communities in Hawaii and seek federal funding to help communities in wildland urban interface plan and prevent wild fires. (1 year)

- B.3. Develop and implement a coordinated approach for invasive species management and control through an integrated program of prevention, response and control, research and applied technology and public outreach. (1 year)
- B.4. Support efforts for invasive species control by implementing Hawaii Invasive Species Council programs and fund county invasive species committees that coordinate, plan and staff county-wide efforts to eradicate or control invasive species populations at non-damaging levels to native species and ecosystems, agriculture and the economy. (1 year)
- B.5. Conduct an aggressive propagation and re-introduction program for T&E species (e.g. Olinda bird rearing facility, plant nursery and out planting). (1 year)
- B.6. Develop conservation incentives such as Safe Harbor Agreements and Habitat Conservation Plans to provide regulatory protections to private landowners that re-introduce endangered species or improve habitats for endangered species on their lands. Implement a Statewide Programmatic Safe Harbor Agreement with the Natural Resources Conservation Agency to restore habitat for endangered waterbirds under the Farm Bill Program. (1 year)
- B.7. Continue to support efforts for brown tree snake (BTS) and other alien species control by promoting interagency cooperation, funding additional inspection efforts on Guam for BTS, expanding the network of volunteers working on invasive species programs, and updating training and equipment for effective rapid response capacity. (2 years)
- B.8. Develop, protect and maintain wetland habitat through management and cooperative agreements with other agencies and private organizations. (2 years)
- B.9. Manage the State Seabird Sanctuary system and other seabird nesting colonies by controlling predators, enhancing nesting habitat, salvaging and rehabilitating grounded seabirds, and enforcing wildlife sanctuary rules. (1 year)
- B.10. Protect native species and their habitats through predator control and other improvement activities. (1 year)
- B.11. Develop and acquire new management techniques and equipment for managing and monitoring native ecosystems, including alternative techniques for introduced animal and plant control. (5 years)
- B.12. Conduct surveys of rare and endangered plants and wildlife and monitor the effects of management activities. (1 year)
- B.13. Initiate a program of survey and monitoring for avian flu in migratory birds throughout the State and develop response plans to prevent its establishment in the State. (5 years)

- B.14. Promote and encourage meaningful applied research that addresses endangered species and natural area management needs and concerns such as limiting factors or critical habitat needs for endangered plant species. Enter a cooperative agreement with the U.S. Forest Service to establish a Tropical Experimental Forest in Hawaii and establish long-term studies on forest ecology and climate change. (2 years)
- B.15. Develop contingency plans and capacity to rehabilitate wildlife impacts resulting from oil spills and other emergencies. (1 year)
- B.16. Develop projects to implement the Comprehensive Wildlife Conservation Strategy to preserve, protect and restore native and endangered wildlife, plants and their habitats. (5 years)

Policy C: To provide managed opportunities and facilities for the public to engage in multiple-use outdoor recreation activities (hiking, biking, equestrian riding, off-highway vehicle (OHV) use, hunting, and camping) while also providing access for resource management. To maintain, and enhance a public hunting program to provide a source of food and outdoor recreation for the public and as a means to control introduced game animals in watershed areas. To inventory, document ownership and restore specific historic trails and non-vehicular old government roads for public use where it is feasible and culturally appropriate.

Objectives and Time frame:

- C.1. Maintain and construct roads and trails to allow managed public use of recreational areas. Work with off-highway vehicle clubs to develop and manage new OHV recreation areas statewide – open a portion of Sand Island State Park as a OHV recreation area. (1 year)
- C.2. Protect ancient and historic trails and accesses. Establish management plans or cooperative agreements for the Trail to the Sea in West Hawaii and the Moloaa coastal trail on Kauai. (1 year)
- C.3. Conduct public hunting seasons, inventory and conduct surveys of game birds and mammals, and evaluate hunter harvest for setting seasons and rules, and manage public hunts. (1 year)
- C.4. Construct and maintain forest and wildlife recreational facilities such as trail shelters, arboreta, picnic grounds, viewpoints, signs, bridges and campgrounds. (1 year)
- C.5. Improve game wildlife populations and habitat by planting food crops, noxious vegetation and predator control, and game bird restocking where appropriate. (2 years)
- C.6. Construct and maintain hunter checking stations, wildlife water units, hunter informational boundary, and safety zone signs, and game feeding sites. (1 year)

- C.7. Investigate and take appropriate action to control wildlife causing a nuisance, risk to human health, or damage to agricultural crops. Develop and implement a plan to control wild pigs in Manoa Valley, Oahu and other urban areas statewide. (1 year)
- C.8. Advocate for public access by commenting on development plans and forming agreements with private landowners to increase public use of trails and accesses. (2 years)
- C.9. Provide additional hunting opportunities by developing new public hunting areas and creating incentive program to encourage more hunting on private lands. (2 years)
- C.10. Develop responsible mechanisms to manage commercial uses such as encourage eco-tourism in ways that sustain the natural resources and provide benefits to the local community. (2 years)
- C.11. Develop new partnerships and support mechanisms to improve operations and maintenance, access, public safety and user experience and enjoyment at high-use visitor facilities on each island. (1 year)
- C.12. Develop new cooperative agreements with private landowners to open up access to landlocked State forest reserves and hunting areas. Re-open the Poamoho Trail on Oahu to regulated public access for hiking and hunting. (1 year)
- C.13. Establish and implement rules for use of warning signs to identify areas with natural hazards to mitigate and reduce the risk to the public and provide state with immunity from unavoidable hazards where appropriate. (1 year)

Policy D: Strengthen the State's economic opportunities through forest resource management to improve and assist in the sustainable production of forest products and services from Forest Reserves and other public and private lands. Promote resource restoration and conservation through outreach and education.

Objectives and Time frame:

- D.1. Encourage private investment for commercial forest development. (1 year)
- D.2. Plan for, and implement the reforestation and management of deteriorating and/or disturbed state lands for commercial forest resources production, native resource protection, watershed value enhancement, and other forest purposes by implementing reforestation project at Keanakolu and Humuula Forest Reserve. (2 years)
- D.3. Plan and administer commercial forest management activities on State land which includes resource inventory, forest product sale administration, and reforestation of

commercial forest resources. Implement the Waiakea management plan and issuance of associated permits and licenses and monitoring licensee performance (1-5 years)

- D.4. Plan and administer commercial forest activities to address other management needs and reduce costs for activities such as salvage and clearing of hazardous materials, protection of fences, maintenance of utility and road right-of-ways, and public use facilities. Implement a Fenceline Management Plan for clearing commercial trees along fencelines in the Kohala and Hamakua Districts on Hawaii and issue a permit for Lapahoehoe NAR fenceline. (2 years)
- D.5. Provide private landowners and processors of forest products with technical forestry assistance. Conduct restoration and landowner assistance workshops. (1 years)
- D.6. Administer State and Federal cost sharing programs such as urban forestry and forest stewardship and hold a regional coastal disaster readiness conference. (1 year)
- D.7. Operate the Central Tree Nursery in Kamuela and district nurseries for distribution of high quality tree seedlings for reforestation, special use plantings such as windbreaks and propagation of native plants for out planting. (1 year)
- D.8. Plan and administer new forest products harvest activities in appropriate lands designated for commercial forestry activities on State lands and purchase small sawmills for branch use and sawmill training. (1 year)

Policy E: Develop volunteer and information programs for natural resource management that allow meaningful and productive community involvement in the stewardship of natural resources on public lands.

Objectives and Time frame:

- E.1. Maintain and improve Division websites that will give the public easy access to information about DOFAW, ongoing Division projects, and basic conservation information and publish a twice yearly newsletter about program activities and accomplishments. (1 year)
- E.2. Encourage private citizens to work on natural resource management projects by supporting community volunteer programs. (1 year)
- E.3. Work with the Hawaiian community to develop appropriate protocols for sustainable traditional and cultural gathering. (2 years)
- E.4. Develop information and educational materials on Division's programs such as maps, reports, brochures, teacher's packets, videos, and posters. (1 year)

- E.5. Expand young adult natural resource stewardship training programs such as Youth Conservation Corps (YCC) and Americorp to educate a new generation in natural resource conservation. (1 year)
- E.6. Work with local schools and community members to identify and care for the next generation of young koa trees at the Kapapala Koa Canoe Management Area, Hawaii. (5 years)
- E.7. Implement the Memorandum of Agreement with the Office Of Hawaiian Affairs (OHA) for the Management of the Wao Kele O Puna Forest on Hawaii to assist OHA with the development of land management capability within their agency for management of this and other OHA lands in the future. (1 year)
- E.8. Develop a Memorandum of Agreement with DOE-West Hawaii District and local hotels to fund a canoe carving class using surplus non-native and native woods from the Big Island.

III. Measures of Effectiveness

Policy A:

- Number of private landowners and public agencies involved in watershed partnerships.
- Number of acres in natural areas and watersheds actively controlled for non-native plants
- Number of acres in natural areas and watershed partnerships protected from feral ungulates.
- Number of acres protected by Natural Area Partnership Program contracts.
- Percent of T&E species being managed.
- Number of research/educational permits issued by NARS Commission as % of plan.

Policy B:

- Number of T&E plant and animal species with active recovery implementation programs.
- Number of alien pests being managed.
- Number of county-wide invasive species eradications.
- Number of acres of reserves and sanctuaries being actively managed.
- Number of acres fenced, protected from ungulates, and in active restoration projects.
- Number of native animal species effectively managed or monitored compared to plan.
- Number of miles of firebreak constructed and maintained compared to plan.
- Number of fires responded to compared to plan.

Policy C:

- Percent of trails and access roads maintained annually compared to total mileage.

- Percent of recreational facilities maintained annually compared to total.
- Number of signs installed and maintained annually.
- Number of game animals harvested annually.
- Number of special hunting tags, permits and applications issued annually.
- Number of new public hunting areas developed annually.
- Number of commercial trail tour patrons guided annually.
- Number of ancient and historic trail abstracts performed annually.

Policy D:

- Acres of trees planted or reforested.
- Number of urban forestry projects implemented
- Dollars of private sector investment and number of jobs created within forest industry.
- Percentage of seedlings distributed or sold.
- Board feet of timber harvested.
- Number of landowners, organizations or communities assisted.
- Acres acquired or secured for forest reserve or other conservation purposes.
- Acreage of Departmental lands under commercial timber management.

Policy E:

- Number of education materials produced and distributed to target audiences.
- Number of volunteers who assist with trail stewardship.
- Number of hits on web page.
- Dollar value of volunteer labor.